

In the Claims

1. (Currently amended) A method of enabling channel scanning in a wireless station, said method comprising:

Receiving, from an access point, a data packet that includes a data field for specifying a value that provides to indicate a possibility likelihood of a regulatory domain change; and,

after a connection with the access point is terminated, selecting a channel scanning method based upon the value of said data field.

2. (Currently amended) The method of claim 1, wherein said value of said data field is a binary value that indicates whether or not there is a possibility of a regulatory domain change.

3. (Currently amended) The method of claim 1, wherein said value in said data field is determined based on geographic information regarding the vicinity of the access point.

4. (Currently amended) The method of claim 1, wherein said value in said data field is determined based on proximity information of the access point related to a predetermined point.

5. (Currently amended) The method of claim 1, wherein said value in said data field is determined based on maximum coverage area and geographical information regarding the vicinity of the access point.

6. (Currently amended) The method of claim 1, wherein said selecting a channel scanning method comprises selecting a safe channel scanning method when the value of the

data field indicates that there is a possibility of a regulatory domain change is likely.

7. (Currently amended) The method of claim 1, wherein said selecting a channel scanning method comprises selecting an active channel scanning method when the value of the data field indicates that there is no possibility of a regulatory domain change is not likely.

8. (Currently amended) A method of enabling channel scanning in a wireless station, said method comprising:

establishing communication between said wireless station and an access point;

receiving, from said access point, information in a data packet that includes regulatory domain information and a lifetime field for specifying a value that represents provided to indicate a period of time beyond for which the regulatory domain information in the data packet remains valid expires after the termination of communication between said wireless station and said access point has been lost; and

determining whether after an elapsed period of time after following the termination of communication between said wireless station and said access point, determining whether or not the elapsed period of time has been lost is greater than the period of time represented by the value in said lifetime field.

9. (Currently amended) The method of claim 8, wherein the value specified in said lifetime field is determined based in part receiving information comprises obtaining the shortest distance from a regulatory domain boundary to an edge of the coverage area of the access point.

10. (Original) The method of claim 8, further comprising obtaining a speed of said wireless station.

11. (Currently amended) The method of claim 8, further comprising selecting a safe channel scanning method if the elapsed period of time is greater than the period of time represented by the value specified in said lifetime field.

12. (Currently amended) The method of claim 8, further comprising determining whether or not there is a possibility of a regulatory domain change is likely when the termination of communication between said wireless station and said access point.

13. (Currently amended) The method of claim 12, further comprising performing safe channel scanning when it is determined that there is a possibility of a regulatory domain change is likely.

14-16. (Canceled)

17. (Currently amended) A wireless station which scans for channels in a wireless communication network, said wireless station comprising:

a receiver for receiving a data packet from an access point block, wherein said data packet block comprises a regulatory domain change pre-alert field for specifying a value indicating a likelihood of a regulatory domain change when communication between the wireless station and the receiver terminates;

a controller coupled to said receiver, said controller selecting a channel scanning method based upon the value specified data in said regulatory domain change pre-alert field; and

a transmitter coupled to said controller.

18. (Currently amended) The wireless station of claim 17, wherein said value

specified in said regulatory domain change pre-alert field comprises a bit indicating whether or not there is a possibility of a regulatory domain change.

19. (Currently amended) The wireless station of claim 18, wherein the transmitter transmits a probe frame if when said regulatory domain change pre-alert field is not set.

20. (Currently amended) The wireless station of claim 17, wherein said data packet regulatory domain change pre-alert field is sent in as a beacon frame.

21. (Currently amended) The wireless station of claim 17, wherein said regulatory domain change pre-alert field data packet is sent in as a probe response frame.

22. (Currently amended) A wireless station which scans for channels in a wireless communication network, said wireless station comprising:

a receiver for receiving a data packet from an access point block, wherein said data block packet comprises a lifetime field for specifying a value indicative of related to the extent of a regulatory domain;

a controller coupled to said receiver, said controller selecting a channel scanning method based upon data value specified in said lifetime field; and

a transmitter coupled to said controller.

23. (Currently amended) The wireless station of claim 22, wherein the controller selects a safe channel scan method if when communication between the wireless station and the access point has been terminated for a time period exceeding said value specified in said lifetime field has expired.

24. (Currently amended) The wireless station of claim 22, wherein said value

specified in said lifetime field is determined based upon a maximum handover time.

25. (Currently amended) The wireless station of claim 22, wherein said value specified in said lifetime field is determined based on a shortest distance from between a regulatory domain boundary to and an edge of the a coverage area of an access point.

26. (Currently amended) The wireless station of claim 22, wherein said value specified in said lifetime field is determined based upon a maximum speed of said wireless station.

27. (Withdrawn) A telecommunication system comprising:

a network comprising at least one server;

a wireless station comprising: a receiver for receiving a data block, wherein said data block comprises a domain change pre-alert field;

a controller coupled to said receiver, said controller selecting a channel scanning method based upon data in said domain change pre-alert field; and

a transmitter coupled to said controller; and an access point providing said data block to said wireless station.

28. (Withdrawn) The telecommunication system of claim 27, wherein the transmitter transmits a probe frame if said domain change pre-alert field is not set.

29. (Withdrawn) The telecommunication system of claim 27, wherein said data in said domain change pre-alert field is based on geographic information of the access point.

30. (Withdrawn) The telecommunication system of claim 27, wherein said data in said domain change pre-alert field is based on information related to proximity of the access

point to a predetermined point.

31. (Withdrawn) The telecommunication system of claim 27, wherein said data in said domain change pre-alert field is based on a maximum coverage area and geographical information of the access point.

32. (Withdrawn) A telecommunication system comprising:

a network comprising at least one server;

a wireless station comprising:

a receiver for receiving a data block, wherein said data block comprises a lifetime field;

a controller coupled to said receiver, said controller selecting a channel scanning method based upon data in said lifetime field; and

a transmitter coupled to said controller; and an access point providing said data block to said wireless station.

33. (Withdrawn) The telecommunication system of claim 32, wherein said lifetime field is based upon a maximum handover time.

34. (Withdrawn) The telecommunication system of claim 32, wherein said lifetime field is based upon the shortest distance from a domain boundary to an edge of a coverage area of the access point.

35. (Withdrawn) The telecommunication system of claim 32, wherein said lifetime field is based upon a maximum speed of said wireless station.

36. (Withdrawn) The telecommunication system of claim 32, further comprising performing a safe channel scan if an elapsed period of time after the communication between said wireless station and said access point has been lost is greater than a period of time in said lifetime field.

37. (Withdrawn) A telecommunication system comprising:

a network comprising at least one server;

a wireless station comprising: a receiver for receiving a data block, wherein said data block comprises fields for information about a domain-independent channel;

a controller coupled to said receiver; and

a transmitter coupled to said controller; and an access point providing said data block to said wireless station.

38. (Withdrawn) The telecommunication system of claim 37, wherein the wireless station actively scans the domain independent channel.

39. (Withdrawn) The telecommunication system of claim 37, wherein the wireless station performs an active channel scan if valid domain information is identified during a scan of the domain-independent channel.